

C L A I M S

1. A transaction system for conducting financial transactions, cooperating
5 with a mobile telephony network adapted to provide telephony services to a plurality of mobile phones, said system comprising:
 - an administrating server adapted to administer accounts of merchants
 and customers, and adapted to communicate at a given time
 with at least one of the plurality of mobile phones of a customer
10 via the mobile telephony network;
 - at least one of a plurality of communication units which are located at
 merchants' point of sale adapted to communicate with said
 administrating server;
 - wherein the communication unit is adapted to identify the mobile phone, and
15 adapted to communicate to said administrating server a first
 communication message comprising transaction details, identifying the
 merchant, the customer and specifying an amount to be paid;
 - wherein said administrating server is adapted to communicate the transaction
 details in a second communication message via the mobile telephony
20 network to the mobile phone for authorization by the customer, and
 adapted to receive authorization from the customer in a third
 communication message from the mobile phone via the mobile
 telephony network;
 - wherein said administrating unit is further adapted to communicate a
25 transaction authorization in a fourth communication message to said
 communication unit;
 - wherein said communication unit is adapted to finalize the transaction by
 communicating a fifth communication message to said administrating
 server;
 - 30 and wherein said administrating server is adapted, after receiving the
 finalizing message to debit the customer's account in the amount to be
 paid and credit the merchant's account accordingly.

2. A system as claimed in Claim 1, wherein the mobile telephony network is a GSM network.
- 5 3. A system as Claimed in Claim 1, wherein the mobile phone is adapted to cooperate in said system by means of an application program which is a built-in hardware application or a software application.
4. A system as Claimed in Claim 1, wherein the mobile phone is adapted
10 to cooperate in said system by means of an application program which is a built-in hardware application or a software application stored on a memory of the mobile phone memory or on a SIM card.
5. A system as Claimed in Claim 3 or Claim 4, wherein the application
15 program stores permanently personal parameters of the customer such as the customer's identification details, and enables sending and receiving wireless data communications and Inputting data through a keypad of the mobile phone, and viewing messages on a display of the mobile phone.
- 20 6. A system as claimed in Claim 1, wherein communication between said administrating server and the mobile phone is conducted using SMS protocol.
7. A system as claimed in Claim 1, wherein communication between said
25 administrating server and the mobile phone is conducted using WAP protocol.
8. A system as claimed in Claim 1, wherein the communication unit is adapted to identify the mobile phone by receiving an ID number from the customer.
- 30 9. A system as claimed in Claim 1, wherein the communication unit is adapted to identify the mobile phone by receiving an ID number from the customer, who enters the ID number directly into said communication unit.

10. A system as claimed in Claim 1, wherein the communication unit is adapted to identify the mobile phone by receiving an identifying RF signal from the mobile phone.
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11. A system as claimed in Claim 1, wherein the communication unit is adapted to identify the mobile phone by receiving an identifying arbitrary code or number generated by the mobile phone or by the administrating server, and transmitted to the administrating server for verification.
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12. A system as claimed in Claim 1, wherein the communication unit is adapted to identify the mobile phone by providing the mobile phone with identifiable feature or features, and providing said communication unit with suitable identifying means for receiving the identifiable features.
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13. A system as claimed in Claim 12, wherein the identifiable feature is a barcode, and the identifying means comprise barcode reader.
14. A system as claimed in Claim 12, wherein the identifiable feature is a signal in the audio range, and the identifying means comprise audio receiver.
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15. A system as claimed in Claim 1, wherein said administrating server and communication unit intercommunicate through a point-to-point line or telephone lines or wireless communication link.
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16. A system as claimed in Claim 1, wherein the fifth communication message is carried out instantly.
17. A system as claimed in Claim 1, wherein the fifth communication message is carried out after a predetermined number of transactions have been performed.
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18. A system as claimed in Claim 1, wherein the fifth communication message is carried out after a predetermined time has elapsed.

19. A system as claimed in Claim 1, wherein the fifth communication message is carried out after a predetermined sum of transactions has been reached.

20. A system as claimed in Claim 1, wherein the accounts of merchants and customers are managed in financial institutes, such as banks, credit providing companies and the like.

21. A system as claimed in Claim 1, wherein said administrating server comprises communication interface to the mobile telephony network, a database which merchants' and customers' details, balance, credit limitations and any additional information details are stored, archive in which past transaction information is stored for reference, communication interface adapted to facilitate communication between the administrating server to a plurality of merchant communication units, and a processing unit adapted to manage the merchant's and customer's accounts, and communicate with the communication units and with customers mobile phones.

22. A system as claimed in Claim 1, wherein communications between said administrating server and the communication unit are conducted via the internet.

23. A system as claimed in Claim 1, wherein said communication unit comprises communication interface to the mobile telephony network, communication interface to the plurality of merchants' communication units, database for storing transaction information locally, a user interface, a printer, for printing out receipts or other forms of purchase proof, and a processing unit for controlling the performance of said communication unit

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24. A transaction system for conducting financial transactions, cooperating with a first mobile telephony network adapted to provide telephony services to a plurality of mobile phones and at least one of a plurality of mobile phones of visitors originally registered with a second mobile telephony network, said
- 5 system comprising:
- a first administrating server adapted to administer accounts of merchants and customers, and adapted to communicate at a given time with at least one of the plurality of mobile phones of a customer via the mobile telephony network,
 - 10 a second administrating server similar to the first administrating server, operating in the second mobile telephony network, administering accounts of the visitors and adapted to communicate with said first administrating server;
 - at least one of a plurality of communication units which are located at
 - 15 merchants' point of sale adapted to communicate with said first administrating server;
- wherein the communication unit is adapted to identify the visitor's mobile phone, and adapted to communicate to said first administrating server a first communication message comprising transaction details,
- 20 identifying the merchant, the visitor and specifying an amount to be paid;
- wherein said first administrating server is adapted verify the visitors identification details and balance wioth the second administrating server, to communicate the transaction details in a second
- 25 communication message via the mobile telephony network to the visitor's mobile phone for authorization by the visitor, and adapted to receive authorization from the visitor in a third communication message from the mobile phone via the mobile telephony network;
- wherein said first administrating unit is further adapted to communicate a
- 30 transaction authorization in a fourth communication message to said communication unit;

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wherein said communication unit is adapted to finalize the transaction by communicating a fifth communication message to said first administrating server;

5 and wherein said first administrating server is adapted, after receiving the finalizing message to communicate with said second administrating server and facilitate debiting the visitor's account in the amount to be paid and credit the merchant's account accordingly.

10 25. A system as Claimed in Claim 1, wherein said communication unit is adapted to identify the mobile phone by way of supplying identification details to said communication unit via the internet.

26. A system as claimed in Claim 25, wherein the mobile phone is provided with internet browsing capability.

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27. A method of conducting transactions, incorporating with a mobile telephony network adapted to provide telephony services to a plurality of mobile phones, said method comprising the steps of:

- 20 1. providing an administrating server adapted to administer accounts of merchants and customers, and adapted to communicate at a given time with at least one of the plurality of mobile phones of a customer via the mobile telephony network;
- 25 2. providing at least one of a plurality of communication units which are located at merchants' point of sale adapted to communicate with said administrating server;
3. identifying of the mobile phone by said communication unit;
- 30 4. communicating a first communication message comprising transaction details, identifying the merchant, the customer and specifying an amount to be paid from said communication unit to said administrating server;

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5. communicating the transaction details in a second communication message from the administrating server via the mobile telephony network to the mobile phone for authorization by the customer, and receiving authorization from the customer in a third communication message from the mobile phone via the mobile telephony network to said administrating server;
6. communicating a transaction authorization in a fourth communication message to from said administrating server said communication unit;
7. finalizing the transaction by communicating a fifth communication message from said communication unit to said administrating server;
8. debiting the customer's account in the amount to be paid and crediting the merchant's account accordingly.
28. A method as Claimed in Claim 27, the mobile telephony network is a GSM network.
29. A method as claimed in Claim 27, wherein communicating between said administrating server and the mobile phone is conducted using SMS protocol.
30. A method as claimed in Claim 27, wherein communicating between said administrating server and the mobile phone is conducted using WAP protocol.
31. A method as claimed in Claim 27, wherein the step of identifying of the mobile phone by said communication unit is carried out by receiving an ID number from the customer.

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32. A method as claimed in Claim 27, wherein the step of identifying of the mobile phone by said communication unit is carried out by receiving an ID number from the customer, by him directly entering his ID into said communication unit.

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33. A method as claimed in Claim 27, wherein the step of identifying of the mobile phone by said communication unit is carried out by receiving an identifying RF signal from the mobile phone.

10 34. A method as claimed in Claim 27, wherein the step of identifying of the mobile phone by said communication unit is carried out by receiving identifying arbitrary code or number generated by the mobile phone or by the administrating server, and transmitted to the administrating server for verification.

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35. A method as claimed in Claim 27, wherein the step of identifying of the mobile phone by said communication unit is carried out by providing the mobile phone with identifiable feature or features, and providing said communication unit with suitable identifying means for receiving the
20 identifiable features.

36. A method as claimed in Claim 35, wherein the identifiable feature is a barcode, and the identifying means comprise barcode reader.

25 37. A method as claimed in Claim 27, wherein the step of identifying of the mobile phone by said communication unit is carried out by supplying identification details to said communication unit via the internet.

30 38. A method as claimed in Claim 27, wherein communications between said administrating server and communication unit is conducted through a point-to-point line or telephone lines or wireless communication link.

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39. A method as claimed in Claim 27, wherein the fifth communication message is carried out instantly.

40. A method as claimed in Claim 27, wherein the fifth communication message is carried out after a predetermined number of transactions have been performed.

41. A method as claimed in Claim 27, wherein the fifth communication message is carried out after a predetermined time has elapsed.

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42. A method as claimed in Claim 27, wherein the fifth communication message is carried out after a predetermined sum of transactions has been reached.

43. A method as claimed in Claim 27, wherein the accounts of merchants and customers are managed in financial institutes, such as banks, credit providing companies and the like.

44. A method as claimed in Claim 27, wherein communications between said administrating server and the communication unit are conducted via the internet.

45. A method of conducting transactions, incorporating with a first mobile telephony network adapted to provide telephony services to a plurality of mobile phones and visitors mobile phones, originally registered to a second mobile telephony network, said method comprising the steps of:

1. providing a first administrating server adapted to administer accounts of merchants and customers, and adapted to communicate at a given time with at least one of the plurality of mobile phones of a customer via the mobile telephony network;

2. providing a second administrating server similar to the first administrating server, operating in the second mobile telephony network, administering accounts of the visitors and adapted to communicate with said first administrating server;
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3. providing at least one of a plurality of communication units which are located at merchants' point of sale adapted to communicate with said first administrating server;
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4. identifying the visitor's mobile phone by said communication unit;
communicating a first communication message comprising transaction details, identifying the merchant, the visitor and specifying an amount to be paid from said communication unit to said first administrating server;
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5. verifying the visitors identification details and balance with the second administrating server;
6. communicating the transaction details in a second communication message from said first administrating server via the first mobile telephony network to the visitor's mobile phone for authorization by the visitor;
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7. authorizing the transaction by the visitor in a third communication message from the mobile phone via the first mobile telephony network to said first administrating server;
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8. communicating from said first administrating server a transaction authorization in a fourth communication message to said communication unit;
9. finalizing the transaction by communicating a fifth communication message from said communication unit to said first administrating server;
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10. communicating between said first administrating server
with said second administrating server and facilitating
debiting the visitor's account in the amount to be paid
and credit the merchant's account accordingly.

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46. The system as claimed in Claim 1, wherein said second and third
communication messages are respectively voice request for authorization
transmitted from said administrative server to the mobile phone of the
customer and the customer voicing his authorization to a voice identification
10 means at the administrative server.

47. The system as claimed in Claim 24, wherein said second and third
communication messages are respectively voice request for authorization
transmitted from said administrative server to the mobile phone of the
customer and the customer voicing his authorization to a voice identification
15 means at the administrative server.

48. The method as claimed in Claim 27, wherein said second and third
communication messages are respectively voice request for authorization
transmitted from said administrative server to the mobile phone of the
customer and the customer voicing his authorization to a voice identification
20 means at the administrative server.

49. The method as claimed in Claim 45, wherein said second and third
communication messages are respectively voice request for authorization
transmitted from said administrative server to the mobile phone of the
customer and the customer voicing his authorization to a voice identification
25 means at the administrative server.